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A palliative intervention allows discovery of a rare tumor: Lymphoepithelioma-like carcinoma of the skin

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Abstract

An 85-year-old man is presented, suffering end-stage metastasizing hepatocellular carcinoma with a disabling tumor mass of 5 cm in diameter on his forehead. The tumor emitted an extremely foul odor, very disconcerting to the patient and family. The tumor was excised under local anaesthesia. Histopathologic examination disclosed the astonishing diagnosis of an extremely rare lymphoepithelioma-like carcinoma of the skin.

Introduction

The frequency of non-melanocytic skin cancers in Europe is increasing by up to 7 percent every year [1]. Subsequently an important part of the daily work of the dermatologist in private practice concerns dermato-oncology. In addition to screening patients for skin malignancies or their precursors, the dermatologist is also busy with both surgical and non-surgical treatment procedures. An increasing number of elderly people – many of them living in nursing homes or being cared for by home-nursing services in their own home – confront the dermatologist with situations for which the simplest solutions for the removal of skin tumors must be found, keeping in mind what is in the best interest of the patient and family. *Palliative* dermato-surgical interventions for the terminally ill must be respectful of patient and family wishes, with emphasis on keeping the procedure as minimally invasive as possible in a setting that causes the least disruption. In addition, we report a case of a rare skin cancer: the lymphoepithelioma-like carcinoma of the skin.

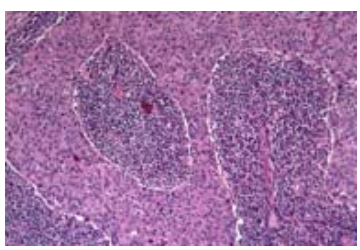
Case report

Figure 1 **Figure 2**

Figure 1. The tumor on the forehead had grown to a mass of 4 to 5 cm in diameter.
Figure 2. The tumor was removed by simple excision with a primary wound.

In June 2010, an 85-year-old man was hospitalized with acute abdominal pain and beginning jaundice. He had been taking levothyroxin for hypothyreosis and lisinopril and torasemid for hypertension. Internal examination revealed a multiloculated hepatocellular carcinoma with an underlying hepatic cirrhosis. The surprising diagnosis and poor prognosis lead to discussions about palliative treatment options with the patient and his family. It was decided to let the patient return home where he would be cared for by his family and his community's visiting nurse service. Four months later the dermatologist was asked to visit the patient at his home because a tumor on his left forehead had grown to a mass of 4 to 5 cm in diameter (Figure 1). The tumor was concealed from view by dressings applied daily, but a bad odor coming from the tumor was troubling the patient and his family. Clinical examination revealed icteric skin and an exophytic tumor of 4 to 5 cm diameter on his left forehead. The differential diagnosis of the consulted dermatologist (T.H.) included Merkel-cell carcinoma, amelanotic melanoma, squamous cell carcinoma, or skin metastasis of the known underlying hepatocellular carcinoma. Observation revealed that the tumor was moving in concordance to the patient's facial skin suggesting that there was no invasion of the tumor mass into the underlying skull. Further investigation revealed that although the skin on the forehead was atrophic, it would be possible to cover the resulting skin defect after a simple excision with a primary wound closure (Figure 2). The procedure, performed in the dermatologist's practice, was done under local anesthesia without any pre-medication, took 20 minutes, and was well tolerated by the patient. The recovery from surgical excision was uneventful. The patient died because of the sequelae of his underlying disease, in the circle of his family at his home six weeks later.

Histopathology



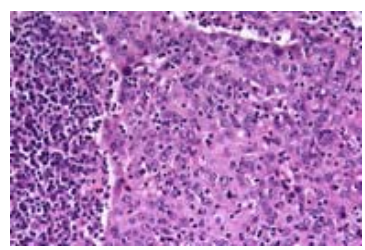


Figure 3 **Figure 4**

Figures 3 and 4. Histologically, the tumor shows a proliferation of epithelial tumor cells and numerous small lymphocytes scattered throughout the entire tumor (H&E, original magnification x100/x200)

Histology revealed a polypoid tumoral proliferation of tumor cells with round vesicular nuclei, prominent nucleoli, and eosinophilic cytoplasm. The tumor cells were arranged in solid broad trabeculae. A connection with the overlying epidermis

was not seen. Necrotic areas were found in the center of the tumor. Numerous scattered small lymphocytes and plasma cells were found throughout the entire tumor (Figures 3 and 4).

Discussion

Lymphoepithelial carcinoma is usually an EBV-associated neoplasm localized in the nasopharyngeal region. Lymphoepithelioma-like carcinoma (LELC) of the skin is very rare with only a few cases reported so far. Kutzner et al [2] reported a prevalence of 1 out of 180,000 skin excisions analyzed in a laboratory specialized for dermatopathology. Histologically, LELC is characterized by a proliferation of epithelial tumor cells and numerous small lymphocytes scattered throughout the entire tumor. Even if the histogenesis of LELC is not yet fully clarified, some authors suggest that LELC may be an unusual morphological manifestation of a subtype of non-keratinizing squamous cell carcinoma with an adnexal or epidermal origin, rather than a distinct clinicopathologic entity [3, 4].

Clinically, the differential diagnosis includes a broad variety of neoplasms such as squamous cell carcinoma, malignant melanoma, and atypical fibroxanthoma as well as other malignant neoplasms. In contrary to other areas of localization of LELC like the salivary glands, stomach, thymus, and lungs, where a strong association with EBV is documented, LELC of the skin does not show such an association [5, 6]. However exceptions are reported [7].

LELC of the skin does not show a highly aggressive course, but micrometastasis in sentinel lymph nodes and in rare cases distant metastasis have been reported [8].

The treatment of choice is surgical excision. LELC of the skin also responds to radiotherapy [9].

The main aim in the case presented here involving a terminally ill patient was to find the least invasive and disruptive solution for removing the foul smelling tumor mass. The patient and his family felt confident enough to consider the possibility of a palliative surgical intervention after the dermatologist gave serious analysis of the clinical findings at the patient's bedside in his own home. In the above described situation, it was in the best interest of the patient and the family to have as few medical professionals and new environments involved as possible. The dermatologist in private practice is in the position to meet these demands through home visits, ambulatory in-practice treatment assisted by a staff well-known to his patients, and by performing post-operative treatment himself. Demographics confirm that there is a consistent growing demand for palliative dermato-oncologic treatment. Future guidelines should preserve enough opportunities for easy care-options in the interest of patients and dermatologists in private practice who often shoulder the burden in such situations.

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